

**Notice of Allowability**

Application No.

09/964,697

Applicant(s)

ASAO ET AL.

Examiner

Tran N. Nguyen

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to 4/28/803.
2. ☐ The allowed claim(s) is/are 1-18.
3. ☒ The drawings filed on 28 September 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                             | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____               | 6 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Allowable Subject Matter*

**Claims 1-18** are allowed.

### *Reason for Allowability*

The following is an examiner's statement of reasons for allowance: the primary reason for the allowance is the including, in combination with other limitations recited in the claims, the limitations of an automotive alternator comprising:

- a shaft rotatable supported by a case;
  - a rotor axed to said shaft, said rotor being provided with a winding for generating a magnetic flux on passage of an electric current wherethrough; and
  - a plurality of claw-shaped magnetic poles disposed circumferentially on an outer circumferential side of said gield winding, said claw-shaped magnetic poles being magnetized by said magnetic flux generated by said held winding, and
- a stator provided with a cylindrical stator core supported by said case so as to envelop said rotor, a plurality of slots extending axially being formed in said stator core so as to line up circumferential; and a stator winding installed in said stator core, wherein said stator core is constructed by laminating a magnetic steel plate, said stator core being provided with a cylindrical base portion; a plurality of teeth portions disposed so as to extend from said base portion toward an axial center, and said plurality of slots, each of said slots being denned by said base portion and an adjacent pair of said teeth portions; ventilation channels are formed by a coil end group of said stator winding and said teeth portions of said stator core, a cooling airflow

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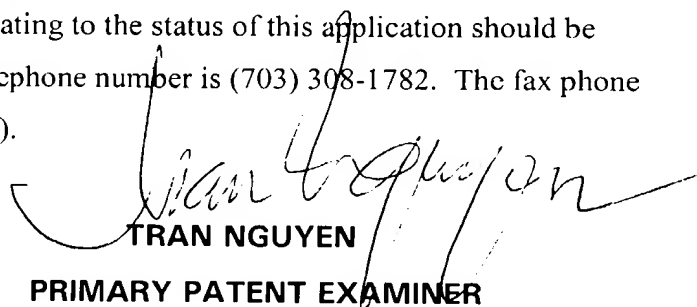
generated by rotation of said rotor Sowing through each of said ventilation channels in a radial direction from an inner circumferential side, and *each of said teeth portions is formed such that a radial length  $ht$  and a width  $bt$  thereof satisfy an expression  $0.15 < bt/ht < 0.4$ .*

The Examiner concurs with the applicant argument. Therefore, comparing to the prior-art of the record, none of the prior art references of the record, either stand alone or in combination, has taught or suggest the above-mentioned features, particularly the ratio of the stator teeth *radial length  $ht$  and a width  $bt$  to be  $0.15 < bt/ht < 0.4$* , in combination with other limitations recited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran Nguyen whose telephone number is (703) 308-1639.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-1782. The fax phone number for this Group is (703) 305-3431 (32).



TRAN NGUYEN

PRIMARY PATENT EXAMINER

TC-2800